

DETECTING THERMAL ANOMALIES IN COMPUTER SYSTEMS BASED ON CORRELATIONS BETWEEN INSTRUMENTATION SIGNALS

ABSTRACT

One embodiment of the present invention provides a system that detects a thermal anomaly in a computer system. During operation, the system derives an estimated signal for a thermal sensor in the computer system, wherein the estimated signal is derived from correlations with other instrumentation signals in the computer system. Next, the system compares an actual signal from the thermal sensor with the estimated signal to determine whether a thermal anomaly exists in the computer system. If a thermal anomaly exists, the system generates an alarm.